# **WASHINGTON STATE**



# Date received:

Agency reference #:

AGENCY USE ONLY

Tax Parcel #(s): \_\_\_\_\_

-JAN-3 0 2014

# Joint Aquatic Resources Permit Application (JARPA) Form<sup>1</sup>

USE BLACK OR BLUE INK TO ENTER ANSWERS IN WHITE SPACES BELOW.

# Part 1-Project Identification

1.	Project Name (A name for your project that you create.	Examples: Smith's Dock of	r S	eab	roo	k La	ane	Dev	elopi	ก่อ	nt) {	Relp)	,	
	Cordata Center Residential													

# Part 2-Applicant

The person or organization responsible for the project. [help]

2a. Name (Last, First, M	liddle) and Organizatio	on (if applicable)		
Murray, Blair of Tin Ro	ock Development			
<b>2b.</b> Mailing Address (	Street or PO Box)			**************************************
1708 F Street				
2c. City, State, Zip		:		
Bellingham, WA 9822	5			
<b>2d.</b> Phone (1)	<b>2e.</b> Phone (2)	2f. Fax	2g. E-mail	
(360 ) 220-0404	( )	( )	blair@tinrockdevelo	pment.com

# Part 3-Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b. of this application.) [help]

3a. Name (Last, First, Middle) and Organization (if applicable)
Jackson, Vikki of Northwest Ecological Services, LLC
3b. Mailing Address (Street or PO Box)
1911 C Street

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=mainpage\_ESA
- If you are applying for an Aquatic Resources Use Authorization you will need to fill out and submit an Application for Authorization to Use State-Owned Aquatic Lands form to DNR, which can be found at http://www.dnr.wa.gov/Publications/aqr\_use\_auth\_app.doc
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you think you will need a Shoreline permit, contact the appropriate city or county government to make sure they will accept the JARPA.

http://www.epermitting.wa.gov/site/alias\_\_resourcecenter/jarpa\_jarpa\_form/9984/jarpa\_form.aspx.

For other help, contact the Governor's Office of Regulatory Assistance at 1-800-917-0043 or help@ora.wa.gov.

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<sup>&</sup>lt;sup>1</sup>Additional forms may be required for the following permits:

<sup>&</sup>lt;sup>2</sup>To access an online JARPA form with [help] screens, go to

3c. City, State, Zip	)	s Agains	
Bellingham, WA 98	3225		
<b>3d.</b> Phone (1)	<b>3e.</b> Phone (2)	<b>3f.</b> Fax	<b>3g.</b> E-mail
(360)739-9484	(360)319-6988	( 360)734-9484	vikki@nwecological.com

i art <del>1</del> —i roperty	Owner(s)							
Contact information for	Contact information for people or organizations owning the property(ies) where the project will occur. [help]							
☐ Same as applicant	. (Skip to Part 5.)							
Repair or maintena	ance activities on existi	ng rights-of-way or e	easements. (Skip to Part 5.)					
∑ There are multiple additional property		plete the section be	low and fill out <u>JARPA Attachment A</u> for each					
4a. Name (Last, First,	Middle) and Organizatio	n (if applicable)						
Cordata Investment,	LLC (this is the primary	development site o	wner)					
4b. Mailing Address	(Street or PO Box)							
1708 F Street								
<b>4c.</b> City, State, Zip								
Bellingham, WA 982	25							
<b>4d.</b> Phone (1)	<b>4e.</b> Phone (2)	4f. Fax	4g. E-mail					
(360) 220-0404	( )	( )	blairmurray@comcast.net					

# Part 5-Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

There are multiple project locations (e.g., linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

· · · · · · · · · · · · · · · · · · ·
5a. Indicate the type of ownership of the property. (Check all that apply.) [help]
State Owned Aquatic Land (If yes or maybe, contact the Department of Natural Resources (DNR) at (360) 902-1100)
☐ Federal
Other publicly owned (state, county, city, special districts like schools, ports, etc.)
☐ Tribal
☐ Private
<b>5b.</b> Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]
No street address. In general project parcels are bound by Cordata Parkway to the west, Horton Road to the north, and property lines to the east and south.
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]
Bellingham, WA
5d. County [help]
Whatcom

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5e. l	Provide th	ne section,	township,	and rang	e for the	project	location.	[help]
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1/4 Section	Section	Township	Range
	1 and 12	38 north	02 east W.M.

### **5f.** Provide the latitude and longitude of the project location. [help]

• Example: 47.03922 N lat. / -122.89142 W long. (NAD 83)

### 48.4811 N lat./-122.2940 W long

### **5g.** List the tax parcel number(s) for the project location. [help]

• The local county assessor's office can provide this information.

The local county assessor's office can pro-	vide this information.	
380201 430035	380212 386563	
388020	410562	
420015	353541	
429002	382550	
	398540	
	421547	
	346520	
	361513	
	415515	
	355490	
	410480	
	352450	
	400445	
	328424	
	388423	
	416397	
	. 353375	

### 5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]

Name	Mailing Address	Tax Parcel # (if known)
4577 MERIDIAN LLC	826 BRIAR RD	380201 434110 0000
	BELLINGHAM WA 98225-7829	
ELITE DEVELOPMENTS INC	P O BOX 2069	380201 471043 0000
	BELLINGHAM WA 98227-2069	
GOLDEN GATE INVESTMENTS INC	3262 164 ST SURREY BC	380212 443512 0000
	CANADA V3S 0G5	
TSUI-LI HORNG	3838 OSLER ST VANCOUVER BC	380212 461438 0000
	CANADA V6H 2W8	

### **5i.** List all wetlands on or adjacent to the project location. [help]

Twenty-two (22) wetlands and one stream were identified within the project site. Wetlands A, C, D, P, and X are palustrine emergent, depressional outflow, DOE Category III wetlands. Wetlands B, E, G, H, I, K, R, V, and Z are palustrine emergent, depressional closed, DOE Category III wetlands. Wetland Y is a palustrine forested/ emergent, depressional outflow, DOE Category I wetland. Wetlands F, J, T, U, and W are palustrine emergent, DOE Category III wetlands that have both depressional outflow and slope components. Wetland M has two units. Unit A is a palustrine forested/ emergent, depressional, DOE Category III wetland. Unit B is a palustrine emergent, riverine, DOE Category II wetland. Wetland S is a palustrine emergent, slope, DOE Category IV wetland. See delineation report for details.

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5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]
A seasonal unnamed stream is located on site, within Wetland M. The center line of the stream appears to be along part of the northern property line.
<b>5k.</b> Is any part of the project area within a 100-year flood plain? [help]
☐ Yes   ☐ Don't know
5I. Briefly describe the vegetation and habitat conditions on the property. [help]
The project site is dominated by a mixture of non-native pasture grasses and weedy herbaceous species. The site appears to be occasionally mowed, but was not maintained at the time of the site visits. Two dominant vegetation communities were observed on-site: upland meadow, and palustrine emergent wetland.
An upland meadow community is located throughout the project area and is the dominant community on-site. Species observed in the UM community included bentgrass ( <i>Agrostis sp.</i> ), tall fescue ( <i>Festuca arundinacea</i> ), red fescue ( <i>Festuca rubra</i> ), orchardgrass ( <i>Dactylis glomerata</i> ), sweet vernalgrass ( <i>Anthoxanthum odoratum</i> ), timothy ( <i>Phleum pratense</i> ), tall buttercup ( <i>Ranunculus acris</i> ), English plantain ( <i>Platago lanceolata</i> ), red clover ( <i>Trifolium pratense</i> ), and Canadian thistle ( <i>Cirsium arvense</i> ).
A PEM wetland community is located in all wetlands within the project area. In most wetlands, the PEM community is dominated by reed canarygrass ( <i>Phalaris arundinacea</i> ) an invasive species. Additional species observed in PEM wetlands included soft rush ( <i>Juncus effusus</i> ), velvetgrass ( <i>Holcus lanatus</i> ), bentgrass, red fescue, meadow fox-tail ( <i>Alopecurus pratensis</i> ), quackgrass ( <i>Elytrigia repens</i> ), creeping buttercup ( <i>Ranunculus repens</i> ), slough sedge ( <i>Carex obnupta</i> ), and wooley sedge ( <i>Scirpus atrocinctus</i> ).
Wetlands C, M, W, and Y appear to extend off-site to the east. The off-site portions these wetlands are forested, and include a mixture of primarily native trees and shrubs, but also contain scrub-shrub areas and open ponds. A limited number of shrubs were observed in wetlands and uplands in the southern portion of the project site, but they do not cover more than 10 percent of the on-site area.
5m. Describe how the property is currently used. [help]
The property is currently undeveloped and is hayed once to twice a year. Adjacent residents use the site as open space.
5n. Describe how the adjacent properties are currently used. [help]
Surrounding land use is mixed commercial, light industrial and residential development. The right-of-way for Stuart Road extends into a portion of the southern project area. However, the road has not yet been constructed through the project site. Parcels at the intersection of Cordata Parkway and Horton Road, and Cordata Parkway and Stuart Road are both developed with commercial mixed use development. Parcels to the east are undeveloped and forested.
<b>50.</b> Describe the structures (above and below ground) on the property, including their purpose(s). [help]
None present, except for a stormwater control feature at the outlet of Wetland A.
<b>5p.</b> Provide driving directions from the closest highway to the project location, and attach a map. [help]
Access from I-5 in Bellingham at Exit 256 (Guide Meridian Street). Turn right (north) and continue until Kellogg Road. Turn left (west) on Kellogg and turn right (north) at the traffic circle at Cordata Parkway. Go about 0.34 miles north on Cordata Parkway. The site is situated on the east side of Cordata Parkway between Stuart Road and Horton Road. Map attached

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# Part 6-Project Description

6a. Summarize the overall project. You can provide more detail in 6d. [help]						
The proposed project includes construction of "Cordata Center Residential" a residential development with commercial amenities on the 39.08 (+/-) acre site. Residential areas would include both multi and single family housing. The project will also provide associated road and utilities (water, sewer, stormwater), and an easement for a City trail.						
<b>6b.</b> Indicate the project cate	egory. (Check all that apply) [he	. [ם				
	☐ Commercial ☐ Residential ☐ Institutional ☐ Transportation ☐ Recreational					
6c. Indicate the major elem	ents of your project. (Check a	all that apply) [help]				
☐ Aquaculture ☐ Bank Stabilization ☐ Boat House	☐ Culvert ☐ Dam / Weir ☐ Dike / Levee / Jetty	☐ Float ☐ Geotechnical Survey ☐ Land Clearing				
☐ Boat Launch ☐ Boat Lift ☐ Bridge ☐ Bulkhead ☐ Buoy ☐ Channel Modification	☐ Ditch ☐ Dock / Pier ☐ Dredging ☐ Fence ☐ Ferry Terminal ☐ Fishway	<ul> <li>☐ Marina / Moorage</li> <li>☐ Mining</li> <li>☐ Outfall Structure</li> <li>☐ Piling</li> <li>☐ Retaining Wall (upland)</li> </ul>	<ul><li>☐ Stairs</li><li>☑ Stormwater facility</li><li>☐ Swimming Pool</li><li>☐ Utility Line</li></ul>			
<ul> <li>✓ Other: mixed use development</li> <li>6d. Describe how you plan to construct each project element checked in 6c. Include specific construction methods and equipment to be used. [help]         <ul> <li>Identify where each element will occur in relation to the nearest waterbody.</li> <li>Indicate which activities are within the 100-year flood plain.</li> </ul> </li> </ul>						
Please see mitigation plan.			·			
<ul> <li>6e. What are the start and end dates for project construction? (month/year) [help]</li> <li>If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.</li> </ul>						
Start date: 2014	Start date: 2014 End date: 2016 See JARPA Attachment D					
6f. Describe the purpose of the project and why you want or need to perform it. [help]						
The proposed project includes construction of "Cordata Center Residential" a residential development with incidental commercial amenities. Residential areas would include both multi and single family housing. Wetlands are located throughout the property and impact is unavoidable if development of site is to occur with current zoning.						
6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]						
Approximately \$8,851,392.						

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6h.	. Will any portion of the project receive federal funding? [help]				
	If yes, list each agency providing funds.				
	☐ Yes	⊠ No	☐ Don't know		

## Part 7–Wetlands: Impacts and Mitigation

Check here if there are wetlands or wetland buffers on or adjacent to the project area. (If there are none, skip to Part 8.) [help]

7a.	Describe how the project has been designed to avoid and minimize adverse impacts to wetlands.	[help]
	☐ Not applicable	
Avo	<b>pid</b> . The project will avoid directly impacting the WDOE Category I wetland (Y), and all or the majorit	ty of

Avoid. The project will avoid directly impacting the WDOE Category I wetland (Y), and all or the majority of Wetlands A, C, M, X, V, and Stream 1. Impacts to other site wetlands are un-avoidable in order to obtain the density required under the Master Plan for this site. Priority has been placed on avoiding higher quality/ functioning wetlands and/or wetlands that have potential because they connect to higher quality/ functioning forested habitat to the east.

**Minimize**. Wetlands, streams, or associated buffers are located over a large portion of the project site. Therefore, impacts to site critical areas are unavoidable if the proposed project is to proceed at the density designated under the current Master Plan. The project team, including NES staff, have designed and reviewed numerous site layout alternatives and during the designs process, and designed the project in order to minimize wetland and stream impacts to the greatest extent possible, by the following:

- Impacts (fill) are proposed in wetlands that provide functions at a lower level, while higher functioning wetlands, wetlands adjacent to higher quality habitat, and the corridor along Stream 1 shall remain intact.
- The standard width of the regulated buffer shall be retained around most retained wetlands, where feasible. Proposed reductions do not exceed the 25-percent reduction allowed with COB director authority as described in BMC 16.55.340 (C)(2).
- Other measures to minimize impacts to retained wetlands and buffers include: directing light away from buffers, establishing a covenant that prohibits use of pesticide, fertilizer and fungicide within 150 feet of wetlands, and fencing, signage and conservation easements to protect and preserve mitigation areas.

**Rectify**. Due to construction within the proximity of numerous wetlands and streams, temporary water quality impacts associated with erosion and/or siltation of surface waters could potentially result. All contractors working on-site shall adhere to the following:

- Disturbance to retained wetlands and buffers will be minimized by staking the buffer limits with a high visibility (orange) construction fence. If any area within the fencing is disturbed during construction, NES shall be notified to make an assessment, and the areas shall be restored to naturally occurring grades to restore pre-construction surface storm flows as much as possible. This is important not so much to protect vegetation, but the condition of the soil in these areas.
- All earthwork within wetlands, streams, or buffers to accomplish mitigation activities will occur between June and September to minimize the potential for erosion.
- The contractor shall adhere to BMP's outlined in this mitigation plan, and any other BMP's listed in the construction documents which may include, but are not limited to, silt fences, mulch or compost berms, straw rolls, temporary construction entrances, catch basin inserts, and tree protection.

Reduce or Eliminate the Hazard by Preservation and Maintenance Operations. The proposed mitigation areas shall be protected by fencing and/or signage, and shall be placed under a permanent conservation easement or covenant to prevent future development. Fencing shall be installed on-site in order to protect retained wetlands, streams, and associated buffers and discourage human and pet intrusion in the buffer. See

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the	Project Protection Section(s) below for details and specifications.
7b.	Will the project impact wetlands? [help]
7c.	Will the project impact wetland buffers? [help]
	⊠ Yes □ No □ Don't know
7d.	Has a wetland delineation report been prepared? [help]  • If yes, submit the report, including data sheets, with the JARPA package.
	⊠ Yes □ No
7e.	Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]  • If yes, submit the wetland rating forms and figures with the JARPA package.
7f.	<ul> <li>Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]</li> <li>If yes, submit the plan with the JARPA package and answer 7g.</li> <li>If No, or Not applicable, explain below why a mitigation plan should not be required.</li> </ul>
	⊠ Yes □ No □ Not applicable
7g.	Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]
con wet Wa	gation for impacts is proposed through both on and off-site mitigation. The proposed mitigation includes a nbination of approaches including wetland creation, wetland enhancement, buffer enhancement, and land preservation. The selected mitigating actions were based on the needs identified within the given tersheds. The proposed mitigation is intended to maintain or increase functions over existing conditions as excribed below:
	• Water Quality Function. In order to compensate for reductions in water quality function due to proposed development, the applicant has proposed wetland creation, and wetland and buffer enhancement. Functional improvement will be provided through the addition of woody plant material in areas where it is currently limited. Vegetation serves a number of important functions to improve water quality and run-off rates. Vegetation acts through a variety of manners, including interception, evapotransporation, conveyance attenuation, temperature moderation, and photoremediation to reduce runoff rates and improve water quality. These processes serve to retain, detain, cool water, and reduce pollutants in runoff. The greater the vegetation structure the more potential the buffer has to detain and cleanse runoff.
	Engineered on-site stormwater facilities will further increase water quality improvement and treatment of run-off from the project site. All phases of construction shall follow BMP's detailed in the current DOE Stormwater Manual to prevent erosion and sediment entering surface waters.
	<ul> <li>Hydrology Function. Wetland creation and enhancement and a state of the art stormwater design are intended to replace lost water storage capacity and maintain hydrology functions. Planting native trees and/or shrubs within the on- and off-site wetlands and buffers is intended to increase the degree of rainwater interception and year round water uptake within the biomass of woody plants. Woody plants will also add increased friction to decrease the runoff velocity of surface waters, and increase the stormwater functions within the project area. In addition, the application of mulch will further increase infiltration capacity, slow stormwater run-off, and promote pollutant removal through</li> </ul>

The engineered stormwater facilities will assist to limit impacts to remaining on-site wetlands by

biological soil activity.

providing hydrology to remaining wetlands at pre-development levels in each basin.

- Thermal Protection Function. No impact has been proposed, however, this function will be increased by planting trees and/or shrubs in wetlands and buffer areas both on- and off-site. Multiple layers of vegetation will help ensure good shade cover over all mitigation areas in areas which currently lack this function. Proposed stormwater treatment ponds may result in increased surface water temperatures, but should not have any net adverse affect to down stream fish bearing waters.
- Wildlife Habitat Function. The off-site mitigation site is a key wildlife corridor within the Bear Creek and Silver Creek watersheds. The applicant and the COB have procured this significant property. Establishing a more diverse native plant community within all mitigation areas will increase the habitat suitability to a wider variety of wildlife species in both the on- and off-site mitigation areas. Habitat features shall be installed in both on- and off-site mitigation areas to further enhance this function. Buffer enhancements will take place between the on-site development and retained wetlands to provide screening. Fencing and/or hedges will be installed to detour human and pet disturbance in the wetlands, streams, or buffers. The proposed future park will be established to protect and enhance these functions.
- **7h.** Use the table below to list the type and rating of each wetland impacted; the extent and duration of the impact; and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Impact Duration Proposed

drain, excavate, flood, etc.)	Name <sup>1</sup>	type and rating category <sup>2</sup>	area (sq. ft. or Acres)	of impact <sup>3</sup>	mitigation type <sup>4</sup>	mitigation area (sq. ft. or acres)
See Tables 3 and 8	in attached miti	gation plan.				
Total Wetland Fill	n/a	111	5.06	Permanent	C, E, P	5.53 C
Total Wetland Fill	n/a	IV	0.44	Permanent	C, E, P	15.77 Wetland E 12.93 Buffer E 1.47 P
Bear Creek Preserve Trail Fill	n/a		0.01	Permanent	С	0.04 C

<sup>&</sup>lt;sup>1</sup> If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

Wetland

Page number(s) for similar information in the mitigation plan, if available: <u>Tables 3 (page 13)</u> and 8(pg 34)

7i. For all filling activities identified in 7h., describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

Fill source will originate from site. The cubic yards have not been determined to date. It will be placed in wetlands as site grading occurs.

7j. For all excavating activities identified in 7h., describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

N/A

Activity (fill,

Wetland

Wetland

<sup>&</sup>lt;sup>2</sup> Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

<sup>&</sup>lt;sup>3</sup> Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

<sup>&</sup>lt;sup>4</sup> Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

# Part 8-Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

oxtimes Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.) **8a.** Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. ☐ Not applicable See 7a above. **8b.** Will your project impact a waterbody or the area around a waterbody? [help] ⊠ Yes 8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help] • If yes, submit the plan with the JARPA package and answer 8d. If No, or Not applicable, explain below why a mitigation plan should not be required. ⊠ Yes □ No Not applicable No direct stream impact is proposed. The site plan includes a buffer reduction. 8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan. • If you already completed 7g., you do not need to restate your answer here. [help] See 7d. above **8e.** Summarize impact(s) to each waterbody in the table below. [help] Activity (clear, Waterbody Amount of material Area (sq. ft. or Impact Duration dredge, fill, pile name<sup>1</sup> location<sup>2</sup> of impact<sup>3</sup> to be placed in or linear ft.) of drive, etc.) removed from waterbody directly affected waterbody See Tables 3 and 8 in mitigation plan. If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided. <sup>2</sup> Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain. <sup>3</sup> Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable. 8f. For all activities identified in 8e., describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help] See 7f. 8g. For all excavating or dredging activities identified in 8e., describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help] n/a

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# Part 9-Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already	worked with any government	agencies on this project, list	them below. [help]
Agency Name	Contact Name	Phone	Most Recent Date of Contact
USACOE	Randel Perry	(360) 734-3156	-
DOE	Susan Meyer	(425) 649-7168	
City of Bellingham	Kathy Bell/Kim Weil	(360) 778-8347	
Ecology's 303(d) Lis     If yes, list the paramet     If you don't know, use http://www.ecy.wa.gov	er(s) below. Washington Department of Ecology'		
∐ Yes ⊠ No			
그 이 이 그렇게 하는 아침 가는 얼마를 하는 때문에 무슨다.	I Survey Hydrological Unit Co		[help]
17110002			
	e Inventory Area Number (WI /a.gov/services/gis/maps/wria/wria.h		D]
WIRA1			
turbidity? [help]	struction work comply with the	-	quality standards for
		m lor the standards.	
<ul><li>environment designa</li><li>If you don't know, cor</li></ul>	the jurisdiction of the Shorelir		· · · · · · · · · · · · · · · · · · ·
☐ Rural ☐ Urba			Other
그는데 그리아는 아이 가장 하지만 사람들이다.	ton Department of Natural Re /a.gov/BusinessPermits/Topics/Fore g System.	alienta en el mara a familia la filia del mel 18 de 18	watertyping.aspx for the Forest
Shoreline	☐ Fish ☐ Non-F	Fish Perennial 🔲 Non-I	Fish Seasonal
manual? [help]	esigned to meet the Washingt	,	most current stormwater

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⊠ Yes □ No
Name of manual: 2012 manual
9i. If you know what the property was used for in the past, describe below. [help]
It has been used as a hay field for many years.
9j. Has a cultural resource (archaeological) survey been performed on the project area? [help]
If yes, attach it to your JARPA package.
<b>9k.</b> Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]
None documented on PHS data
91. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]
None

# Part 10-SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <a href="http://apps.ecy.wa.gov/opas/">http://apps.ecy.wa.gov/opas/</a>.
- Governor's Office of Regulatory Assistance at (800) 917-0043 or <a href="mailto:help@ora.wa.gov">help@ora.wa.gov</a>.
- For a list of agency addresses to send your application, click on the "where to send your completed JARPA" at http://www.epermitting.wa.gov.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]
<ul> <li>For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.</li> </ul>
A copy of the SEPA determination or letter of exemption is included with this application.
☐ A SEPA determination is pending with (lead agency). The expected decision date is
☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]
☐ This project is exempt (choose type of exemption below).
☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?
Other:
☐ SEPA is pre-empted by federal law.
10b. Indicate the permits you are applying for. (Check all that apply.) [help]
LOCAL GOVERNMENT
Local Government Shoreline permits:
☐ Substantial Development ☐ Conditional Use ☐ Variance
☐ Shoreline Exemption Type (explain):
Other city/county permits:

JARPA 2010 v1 3/30/2010 Page 11 of 13

☐ Floodplain Development Permit ☐ Critical Areas Ordinance	
STATE GOVERNMENT	_
Washington Department of Fish and Wildlife:	
☐ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption	
Washington Department of Ecology:	
⊠ Section 401 Water Quality Certification	
Washington Department of Natural Resources:	
Aquatic Resources Use Authorization	
FEDERAL GOVERNMENT	
United States Department of the Army permits (U.S. Army Corps of Engineers):	
Section 404 (discharges into waters of the U.S.)	
United States Coast Guard permits:	
☐ General Bridge Act Permit ☐ Private Aids to Navigation (for non-bridge projects)	

Part 11-Authorizing Signatu	ures	,
Signatures are required before submit project plans, photos, etc. [help]	tting the JARPA package. The JARI	PA package includes the JARPA form,
11a. Applicant Signature (required) [	<u>[belp]</u>	· a.
I certify that to the best of my knowled and accurate. I also certify that I have only after I have received all necessar	the authority to carry out the proposition	ded in this application is true, complete, sed activities, and I agree to start work
I hereby authorize the agent named in application (initial)	Part 3 of this application to act on	my behalf in matters related to this
By initialing here, I state that I have th permitting agencies entering the properelated to the project(initialized)	erty where the project is located to i	roperty. I also give my consent to the nspect the project site or any work
Blair Murray, Tin Rock Development		711117014
Applicant Printed Name	Applicant Signature	Date CI JAN 2014.
11b. Authorized Agent Signature [heat certify that to the best of my knowled	ge and belief, the information provid	ded in this application is true, complete,
and accurate. I also certify that I have only after all necessary permits have t	the authority to carry out the propos seen issued.	sed activities and I agree to start work
Vikki Jackson, Northwest Ecological Services, LLC		1/21/14
Authorized Agent Printed Name	Authorized Agent Signature	Date
	sting rights-of-way or easements.	
I consent to the permitting agencies er or any work. These inspections shall o landowner.	ntering the property where the projecur at reasonable times and, if pra	ct is located to inspect the project site actical, with prior notice to the
Property Owner Printed Name	Property Owner Signature	Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-019-09





# **WASHINGTON STATE Joint Aquatic Resources Permit** Application (JARPA) Form [help]

# **JARPA Attachment A:** For additional property owner(s) [help]

Use this attachment only if you have more than one property owner.

AGEN	CA RE ONTA
Date received:	
Agency reference #	
Tax Parcel #(s):	
	, N
TO BE COMPLET	ED BY APPLICANT [help]
UPI #:	
Project Name: Cor	data Center High Tech

Use black or blue ink to e	nter answers in white spaces	s below.	
<b>4a.</b> Name (Last, Firs	t, Middle) and Organizatio	on (if applicable)	
City of Bellingham Pa	rks and Recreation Depar	tment – contact Tim Wahl	
4b. Mailing Addres	S (Street or PO Box)		
3424 Meridian Street			
4c. City, State, Zip			
Bellingham, WA 9822	5		
4d. Phone (1)	<b>4e.</b> Phone (2)	4f. Fax	4g. E-mail
(360)778-7000	( )	(360) 778-7001	twahl@cob.org
Address or tax parc	el number of property y	ou own:	
Bear Creek Prese	erve for off-site mitig	gation (parcels 380202	2 333346; 380202 150361)
Signature of Proper	ty Owner		
Leslie Bryson	, Desigo Dev. Mag	: Sh	ruh
Printed Name		Signatur	е

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORA publication number: ENV-020-09



## Date received:

Agency reference #: \_\_\_\_\_\_

Tax Parcel #(s): \_\_\_\_\_

AGENCY USE ONLY

TO BE COMPLETED BY APPLICANT [help]

## **Project Name: Cordata Center Residential**

Location Name (if applicable): Additional project location is the off-site mitigation site- Bear Creek Preserve.

# WASHINGTON STATE Joint Aquatic Resources Permit Application (JARPA) Form [help]

# JARPA Attachment B: For additional project location(s)

[....

Use this attachment <u>only</u> if you have more than one project location. Use a separate form for each additional location.

		site- beat C	leek I lescive.
Use black or blue ink to enter ar		v. ty. (Check all that apply.) [help]	
			(DND) at (260) 002 1100)
Federal	Land (ii yes or maybe, con	tact the Department of Natural Resources	s (DNN) at (300) 902-1100)
	(state, county, <b>city,</b> special (	districts like schools, ports, etc.)	
☐ Tribal	(,, , <u></u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
☐ Private			
<b>5b.</b> Street Address (Can	not be a PO Box. If there is r	no address, provide other location informa	tion in 5n.) [help]
No address, located or Road and Northwest D		operty entrance to site located (	0.2 miles south of Slater
5c. City, State, Zip (If the	project is not in a city or tow	n, provide the name of the nearest city or	town.) [help]
Bellingham, WA 98226			
5d. County [help]			
Whatcom	·		
<b>5e.</b> Provide the section,	township, and range fo	or the project location. [help]	
1/4 Section	Section	Township	Range
	02	38N	02 E
<b>5f.</b> Provide the latitude a • Example: 47.03922	and longitude of the pro		ters of the first and all begins to Assert Capality satisfies?
48.4851N lat./ -122.31	33 W long	•	
<b>5g.</b> List the tax parcel n  • The local county asso	umber(s) for the project		
380202150361 and 38	0202333346		

Name	Mailing Address	Tax Parcel # (if known
DALE K & JANE P JENSEN TR	4796 NORTHWEST DR BELLINGHAM, WA 98226-9019	380202 100422
RON L & MARY L JOBES	1012 38TH ST BELLINGHAM, WA 98229-3130	380202 149432
D HEFFRING INVESTMENTS INC	2200 RIMLAND DR #205 BELLINGHAM, WA 98226-6639	380202 182432
GENE A & DELILAH A QUANZ	751 SLATER RD BELLINGHAM, WA 98226-8315	380202 215432
GENE A & DELILAH A QUANZ	751 SLATER RD BELLINGHAM, WA 98226-8315	380202 247432
MARGARET G ALLEN	5279 CHERRY TREE LN BLAINE, WA 98230-9356	380202 280432
MARGARET G ALLEN	5279 CHERRY TREE LN BLAINE, WA 98230-9356	380202 310442
RACELIA M GUNDERSON	2435 LEE WAY BELLINGHAM, WA 98226-9560	380202 402458
depressional wetlands with the categories range from II to III. W		streams. WDOE wetland
NES identified 12 wetlands on to depressional wetlands with the categories range from II to III. Wetlands (WDOE) Wetland Rating it is all waterbodies (other than Bear Creek and an un-named tributer identification in the service of	to the project location. [help] the site. Identified wetlands are primarily exception of those located along on-site Vetland categorization is based on the Vng System for Western Washington. wetlands) on or adjacent to the project local tary (Stream 1) are located within the reviewithin a 100-year flood plain? [help]	e streams. WDOE wetland Vashington State Department ation. [help]
NES identified 12 wetlands on to depressional wetlands with the categories range from II to III. We Ecology (WDOE) Wetland Rating 5j. List all waterbodies (other than Bear Creek and an un-named tributostate in the project area in Yes in No in Don't	to the project location. [help] the site. Identified wetlands are primarily exception of those located along on-site Vetland categorization is based on the Vng System for Western Washington. wetlands) on or adjacent to the project local tary (Stream 1) are located within the reviewithin a 100-year flood plain? [help]	e streams. WDOE wetland Vashington State Department ation. [help] w area.
NES identified 12 wetlands on to depressional wetlands with the categories range from II to III. We Ecology (WDOE) Wetland Rations.  5j. List all waterbodies (other than Bear Creek and an un-named tributors. Is any part of the project area Yes No Don't Don't Sl. Briefly describe the vegetation.	to the project location. [help] the site. Identified wetlands are primarily exception of those located along on-site Vetland categorization is based on the Ving System for Western Washington. wetlands) on or adjacent to the project local tary (Stream 1) are located within the reviewithin a 100-year flood plain? [help] know	e streams. WDOE wetland Vashington State Department ation. [help] w area.  [p] anarygrass and other
NES identified 12 wetlands on to depressional wetlands with the categories range from II to III. We Ecology (WDOE) Wetland Rations.  5j. List all waterbodies (other than Bear Creek and an un-named tributors. Is any part of the project area Yes No Don't Don't Sl. Briefly describe the vegetation.	to the project location. [help] the site. Identified wetlands are primarily exception of those located along on-site Vetland categorization is based on the Ving System for Western Washington.  wetlands) on or adjacent to the project local stary (Stream 1) are located within the reviewithin a 100-year flood plain? [help] know and habitat conditions on the property. [help] agricultural fields, dominated by reed can be and forest patches interspersed, most	e streams. WDOE wetland Vashington State Department ation. [help] w area.  [p] anarygrass and other
NES identified 12 wetlands on to depressional wetlands with the categories range from II to III. We Ecology (WDOE) Wetland Ratings.  5j. List all waterbodies (other than Bear Creek and an un-named tributos. Is any part of the project area    Yes No Don't Don't St. Briefly describe the vegetation The site is predominately fallow associated grass species. Shrulost. Describe how the property is The property is currently undevented.	to the project location. [help] the site. Identified wetlands are primarily exception of those located along on-site Vetland categorization is based on the Ving System for Western Washington.  wetlands) on or adjacent to the project local stary (Stream 1) are located within the reviewithin a 100-year flood plain? [help] know and habitat conditions on the property. [help] agricultural fields, dominated by reed can be and forest patches interspersed, most	e streams. WDOE wetland Vashington State Department ation. [help] w area.  Ip] anarygrass and other ly along creek.  ay. An old home site was
NES identified 12 wetlands on to depressional wetlands with the categories range from II to III. We Ecology (WDOE) Wetland Rating 5j. List all waterbodies (other than Bear Creek and an un-named tribution of the project area of Yes of No of Don't Si. Briefly describe the vegetation of The site is predominately fallow associated grass species. Shrulo of the property is the property is currently undevelocated in the western edge of the site of the test of the property is currently undevelocated in the western edge of the site of the property is currently undevelocated in the western edge of the property is the property is currently undevelocated in the western edge of the property is the property is currently undevelocated in the western edge of the property is currently undevelocated in the western edge of the property is the property is currently undevelocated in the western edge of the property is	to the project location. [help] the site. Identified wetlands are primarily exception of those located along on-site Vetland categorization is based on the Ving System for Western Washington.  wetlands) on or adjacent to the project local tary (Stream 1) are located within the reviewithin a 100-year flood plain? [help] know and habitat conditions on the property. [help] agricultural fields, dominated by reed can be and forest patches interspersed, most currently used. [help] eloped and is mowed occasionally for halp he site, but the buildings are no longer property.	e streams. WDOE wetland Vashington State Department ation. [help] w area.  Ip] anarygrass and other ly along creek.  ay. An old home site was

**50.** Describe the structures (above and below ground) on the property, including their purpose(s). [help]

No structures. Informal trails throughout the site. A gas pipeline easement is located on the southern property line.

**5p.** Provide driving directions from the closest highway to the project location, and attach a map. [help]

Take Exit 260/ Slater Road from I-5. Turn east on Slater Road and follow to Northwest Road. Turn right (south) onto Northwest Road and travel 0.2 miles. Property access is on east side of road with gate.

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-021-09

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**WASHINGTON STATE** 

**Joint Aquatic Resources Permit** 

Application (JARPA) Form [help]



## Date received:

Tax Parcel #(s): \_\_\_

Agency	reference	#:		

AGENCY USE ONLY

# **JARPA Attachment C: Contact information for adjoining** property owners, lessees, etc. [help]

Use this attachment only if you have more than four adjoining property owners.

TO BE COMPLETED BY APPLICANT [help]
UPI #:
Project Name: Cordata Center Residential

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

Name	Mailing Address	Tax Parcel # (if known)
•	4805 ALDRICH RD	
RICHARD W & LINDA K KIRSCHMAN	BELLINGHAM, WA 98226-9638	380202 465415
LICENT D THOMAS	510 LAKEWAY DR	
KENT D THOMAS	BELLINGHAM, WA 98225-5234	380202 439365
	3033 RACINE ST	
KRISTIN M ZÚANICH TR	BELLINGHAM, WA 98226-3613	380202 408235
	P O BOX 29061	
MASON C BAILEY	BELLINGHAM, WA 98228-1061	380202 369221
	5017 LAKEHURST LN SE	
MICHAEL B JACOBSEN	BELLEVUE, WA 98006-2649	380202 314234
<del>.</del>	5017 LAKEHURST LN SE	
MICHAEL B JACOBSEN	BELLEVUE, WA 98006-2649	380202 281234
LOWELL G & NANCY RADDER	2546 LUMMI VIEW DR	
WILLIAM E KRAMER & JERELYN J KRAMER	BELLINGHAM, WA 98226-9239	380202 209221
	4712 NORTHWEST DR	
DONALD J WOLFE	BELLINGHAM, WA 98226-9019	380202 141293

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-022-09



Date received:

Tax Parcel #(s):

Agency reference #:
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TO BE COMPLETED BY APPLICANT [help]

**Project Name: Cordata Center Residential** 

# WASHINGTON STATE **Joint Aquatic Resources Permit** Application (JARPA) Form [help]

# JARPA Attachment D: Construction sequence [help]

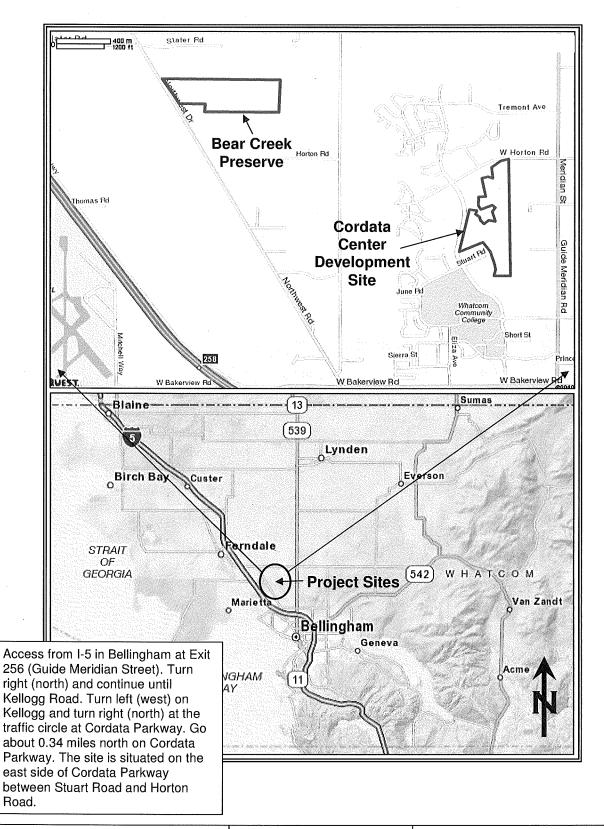
Use this attachment only if your project will be constructed in phases or stages. Complete the outline showing the construction sequence and timing of activities, including the start and end dates of each phase or stage.

Due to the size of the projects, both construction of the project site(s) and installation of mitigation activities both on- and off-site will be phased. Due to the size of the off-site mitigation project it would be difficult to obtain and install all material in one season. Additionally, one year of hydrology monitoring is proposed in all creation areas prior to planting to ensure adequate hydrology and rectify any deficiencies through additional earthwork prior to planting. All creation areas shall be left un-planted through one wet season to monitoring hydrology in order to ensure hydrology performance standards are being met. Timing and actions to be performed during each phase of mitigation installation as shown below and in Page 46 and Table 15 of the Mitigation Report.

Summary of the Implementation Schedule for Impacts and Mitigation

Year	Impact	On-site Mitigation	Off-site Mitigation
2014	Up to 5.50 ac of fill (~71% of proposed fill)	-1.82 ac wetland enhancement -3.61ac buffer enhancement -Earthwork in Wetland M -Install all habitat features -Weed control	-Weed control -7.71ac wetland creation earthwork -Install all habitat features -Trail sub-grade installation
2015	Remaining fill or up to 2.2 ac (~29% of proposed fill)	-Hydrology monitoring -Continue weed control	-Hydrology monitoring -20.66 ac wetland enhancement -9.39 ac buffer enhancement -Continue weed control
2016	none	-1.61 ac wetland enhancement -4.05 ac buffer enhancement	-Plant 7.71 ac wetland creation

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORA publication number: ENV-023-09



Purpose: Residential Development **Applicant:** Tin Rock Development

Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

**Cordata Center Residential** 

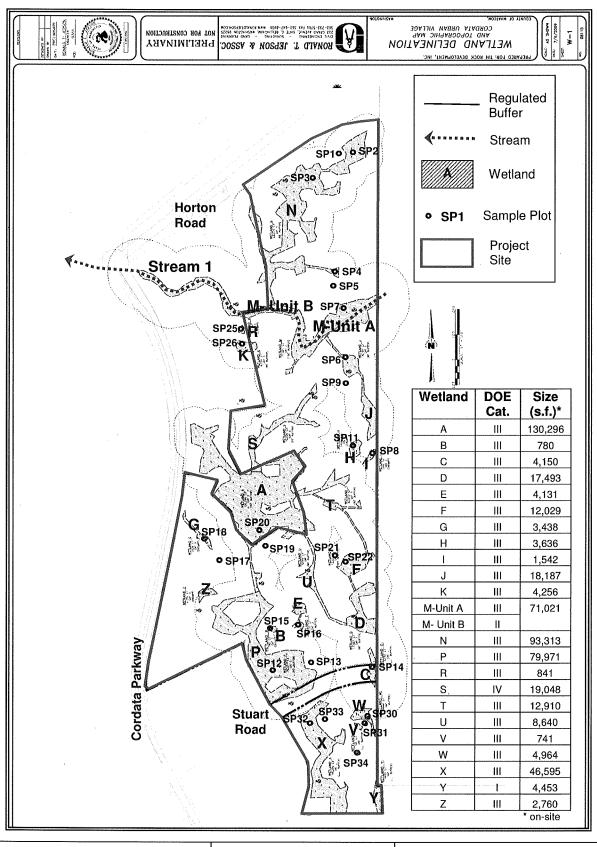
**Vicinity Map** 

In: Wetlands

Location: Cordata Parkway, Bellingham, Sec/Twp/Rng: 1 and 12/38N/02E

State: WA County: Whatcom

Sheet 1 of 18



Purpose: Residential Development Applicant: Tin Rock Development Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

**Cordata Center Residential** 

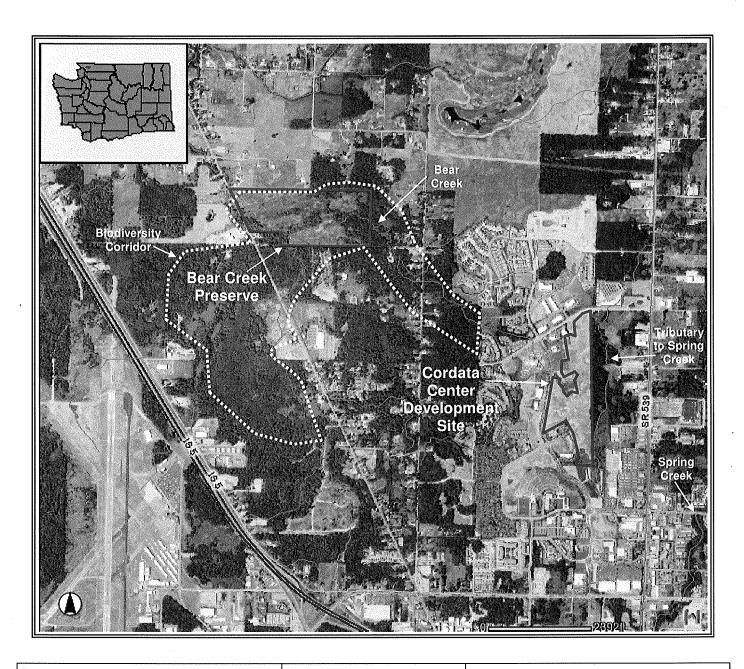
Wetland Map

In: Wetlands

**Location:** Cordata Parkway, Bellingham, **Sec/Twp/Rng:** 1 and 12/38N/02E

County: Whatcom S

State: WA Sheet 2 of 18



Purpose: Residential Development **Applicant:** Tin Rock Development

Project #: NWS-2010-1144
Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

**Cordata Center Residential** 

**Aerial Photograph** 

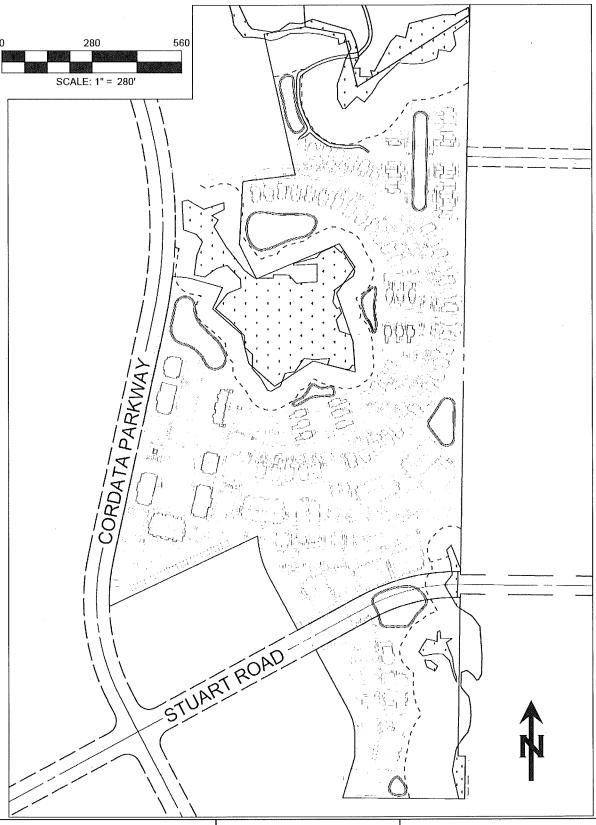
In: Wetlands

Location: Cordata Parkway, Bellingham,

**Sec/Twp/Rng:** 1 and 12/38N/02E County: Whatcom State: WA

Sheet 3 of 18

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Purpose: Residential Development Applicant: Tin Rock Development

Project #: NWS-2010-1144
Adjacent Prop. Owners: See JARPA
Date: 01/08/2014

**Cordata Center Residential** 

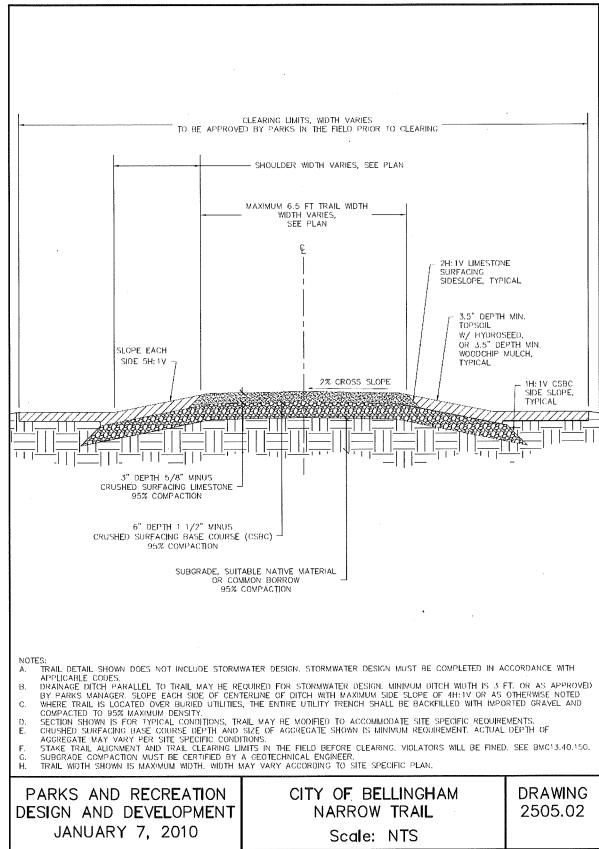
Site Plan

In: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA

Sheet 4 of 18



Purpose: Residential Development Applicant: Tin Rock Development

Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

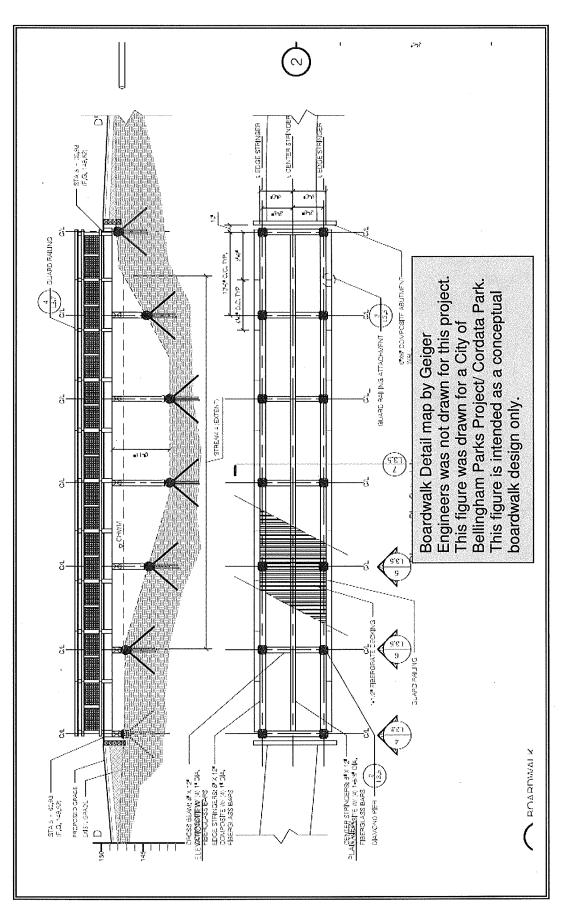
Cordata Center Residential In: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: W/

State: WA Sheet 5 of 18

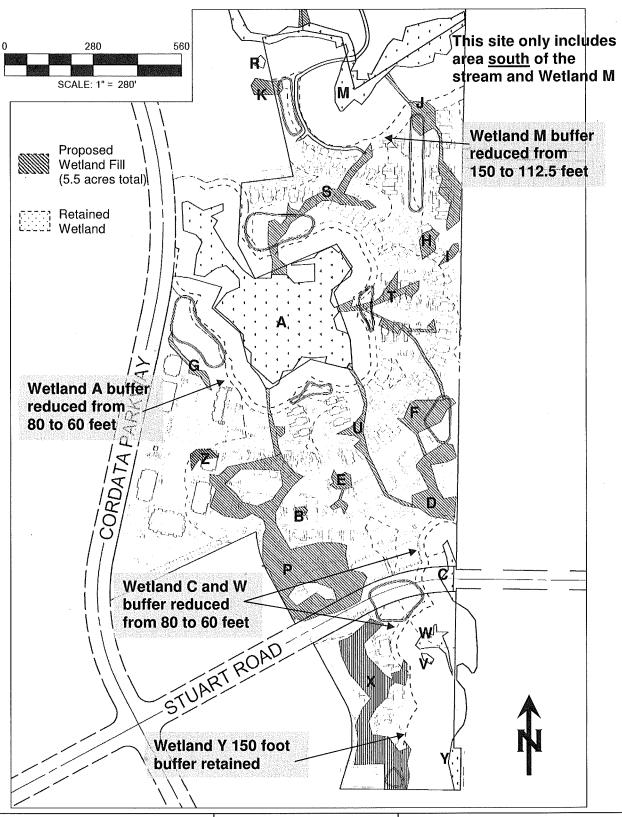
Secondary Trail Cross Section



Purpose: Residential Development	Cordata Center Residential	In: Wetlands
Applicant: Tin Rock Development		Location: Cordata Parkway, Bellingham,
<b>Project #:</b> NWS-2010-1144		<b>Sec/Twp/Rng:</b> 1 and 12/38N/02E
Adjacent Prop. Owners: See JARPA	Conceptual Boardwalk	County: Whatcom State: WA
<b>Date:</b> 01/08/2014	Design	Sheet 6 of 18

Northwest Ecological Services, LLC 1911 C Street, Bellingham, WA 98225 360.734.9484 www.nwecological.com

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**Purpose:** Residential Development **Applicant:** Tin Rock Development

Project #: NWS-2010-1144 Adjacent Prop. Owners: See JARPA

nujacent Flop. Owners. See JAI

Date: 01/08/2014

**Cordata Center Residential** 

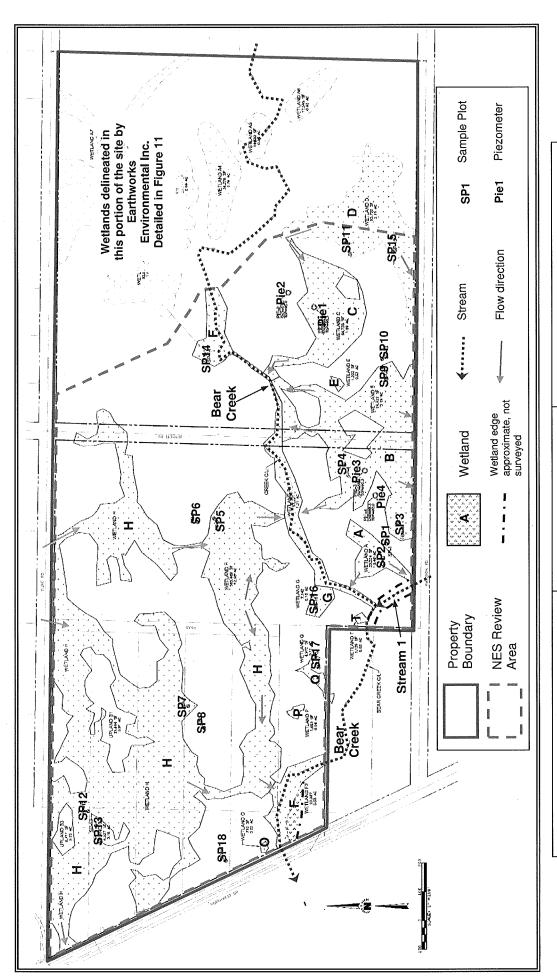
Proposed Impacts Map

In: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA

Sheet 7 of 18

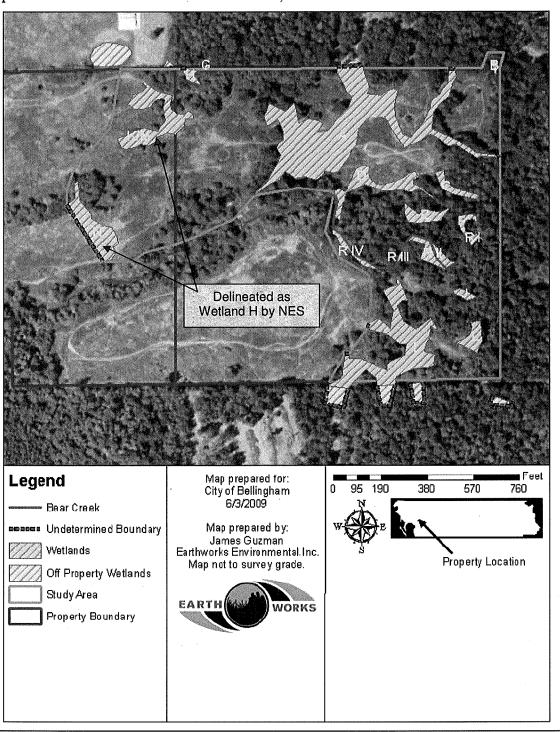


Purpose: Residential Development	Cordata Center Residential In: Wetlands	In: Wetlands
Applicant: Tin Rock Development		Location: Cordata Parkway, Bellingham,
Project #: NWS-2010-1144		Sec/Twp/Rng: 1 and 12/38N/02E
Adjacent Prop. Owners: See JARPA	Bear Creek Preserve	County: Whatcom State: WA
<b>Date:</b> 01/08/2014	Wetland Map	Sheet 8 of 18

Northwest Ecological Services, LLC 1911 C Street, Bellingham, WA 98225 360.734.9484 www.nwecological.com

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**Figure 1.** Wetland and stream map within the study area (portions of Whatcom County tax parcels #380202-333346 and 380202-150361).



Purpose: Residential Development Applicant: Tin Rock Development Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

**Cordata Center Residential** 

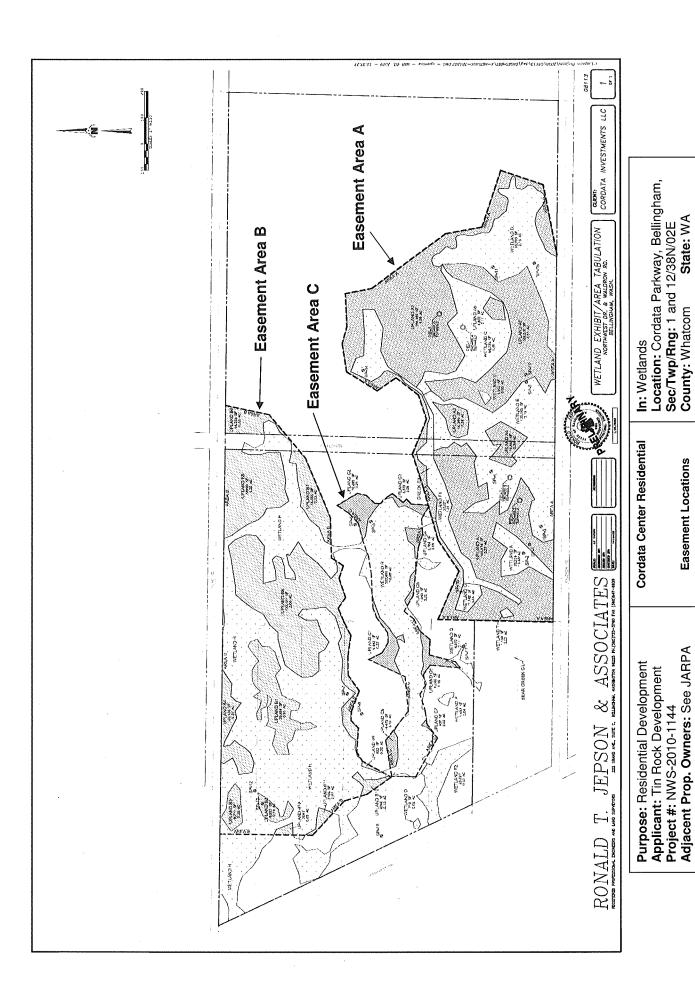
Wetland Map for East Section of Bear Creek Preserve from the Earthworks Recon in: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA

Sheet 9 of 18

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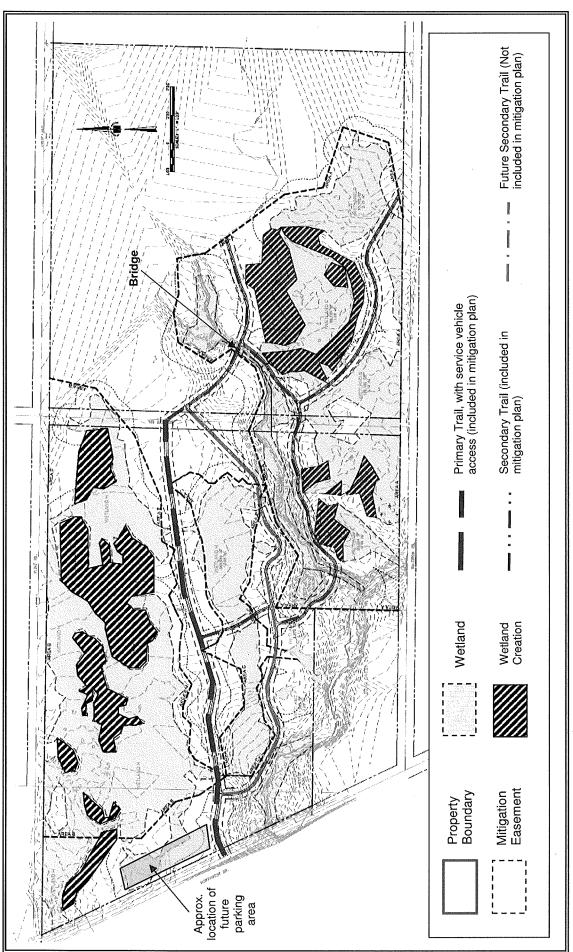


360.734.9484 www.nwecological.com 1911 C Street, Bellingham, WA 98225 Northwest Ecological Services, LLC

Date: 01/08/2014

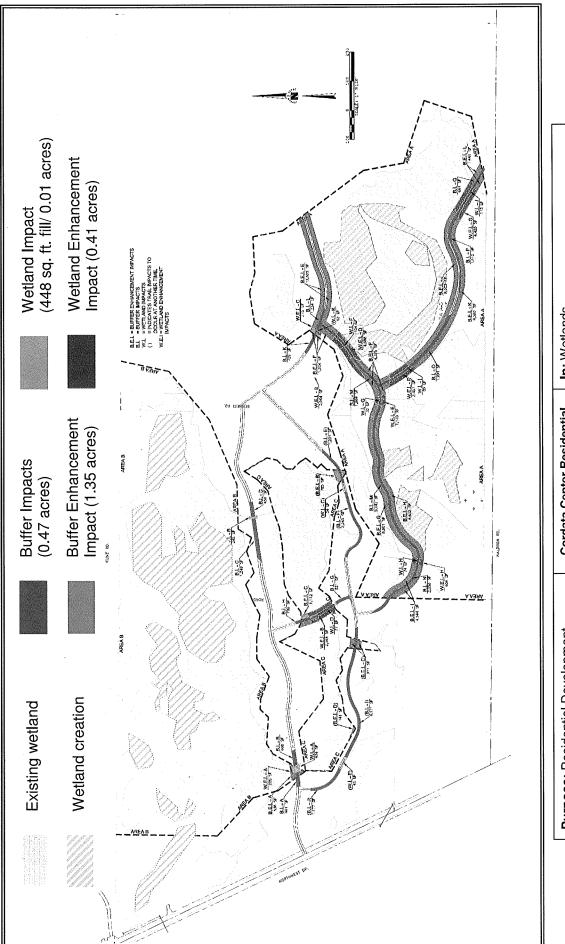
Sheet 10 of 18

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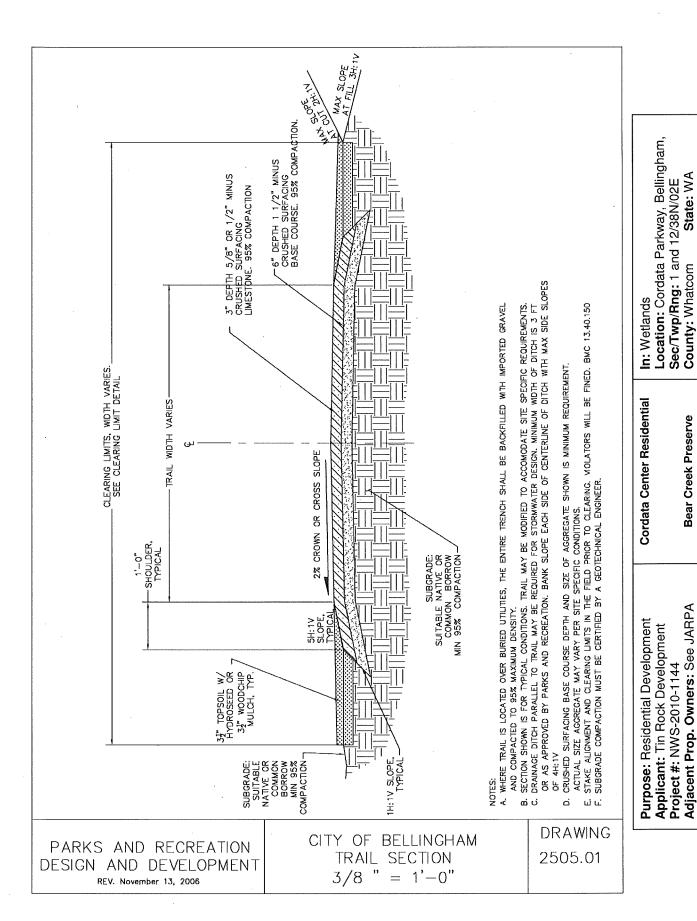
Purpose: Residential Development	Cordata Center Residential	in: Wetlands
Applicant: Tin Rock Development		Location: Cordata Parkway, Bellingham,
<b>Project #:</b> NWS-2010-1144		Sec/Twp/Rng: 1 and 12/38N/02E
Adjacent Prop. Owners: See JARPA	Proposed Bear Creek	County: Whatcom State: WA
<b>Date:</b> 01/08/2014	Preserve Trails Map	Sheet 11 of 18

1911 C Street, Bellingham, WA 98225 360.734.9484 www.nwecological.com Northwest Ecological Services, LLC



Sheet 12 of 18 Location: Cordata Parkway, Bellingham, Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA In: Wetlands Cordata Center Residential Bear Creek Preserve Trail Impacts Map Adjacent Prop. Owners: See JARPA Date: 01/08/2014 Purpose: Residential Development Applicant: Tin Rock Development Project #: NWS-2010-1144

360.734.9484 www.nwecological.com 1911 C Street, Bellingham, WA 98225 Northwest Ecological Services, LLC



360.734.9484 www.nwecological.com 1911 C Street, Bellingham, WA 98225 Northwest Ecological Services, LLC

Primary Trail Cross Section

Date: 01/08/2014

Sheet 13 of 18

MANUFACTURED PEDESTRIAN BRIDGE

- A. BRIDGE DESIGN SHALL BE STANDARD TRUSS CONSTRUCTED OF WEATHERED HSS STRUCTURAL STEEL WITH A CONCRETE BRIDGE DECK AS SHOWN BELOW.
- B. ALL CONSTRUCTION AND DESIGN IS TO BE IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AS ADOPTED BY THE CITY OF BELLINGHAM.

C. PROVIDE A COMPLETE, INTEGRATED SET OF BRIDGE MANUFACTURER'S STANDARD COMPONENTS THAT FORM A BRIDGE, INCLUDE PRIMARY AND SECONDARY FRAMING AND ACCESSORIES.

PRIMARY AND SECONDARY FRAMING AND ACCESSORIES.

D. INFORMATION ON THIS DRAWING ESTABLISHES REQUIREMENTS FOR SYSTEM'S AESTHETIC EFFECTS, AS INDICATED BY SIZES, RELATIONSHIPS AND PROFILES OF COMPONENTS.

1. DO NOT MODIFY INTENDED AESTHETIC EFFECTS, AS JUDGED SOLELY BY PARK PROJECT MANAGER, EXCEPT WITH PRIOR APPROVAL BY PARK PROJECT MANAGER. IF MODIFICATIONS ARE PROPOSED, SUBMIT COMPREHENSIVE EXPLANATORY DATA FOR REVIEW.

E. MANUFACTURER QUALIFICATIONS: A FIRM WITH AT LEAST FIVE YEARS EXPERIENCE IN MANUFACTURING PEDESTRIAN BRIDGE SYSTEMS SIMILAR TO THOSE INDICATED FOR THE PROJECT. THE FIRM SHALL BE AISC CERTIFIED FOR THIS TYPE OF CONSTRUCTION.

1. ENGINEERING RESPONSIBILITY: PROVIDE COMPREHENSIVE ENGINEERING ANALYSIS AND DESIGN BY A QUALIFIED STRUCTURAL ENGINEER WITH WASHINGTON STATE (HEREAFTER REFERRED TO AS "STRUCTURAL ENGINEER").

F. PROMDE FRAMING AND DECKING SYSTEMS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY AND ENVIRONMENTAL LOADS AS SPECIFIED BY STRUCTURAL ENGINEER. DESIGN FOR THERMAL MOVEMENTS WITHOUT OVER STRESSING OR FAILURE OF COMPONENTS OR CONNECTIONS. CONNECTIONS

G. BRIDGE SYSTEM DESIGN: AS SPECIFIED BY STRUCTURAL ENGINEER
1. PRIMARY FRAME TYPE: PARALLEL CHORD TRUSS WITH VERTICAL ENDS BUILT UP OF HSS STEEL SECTIONS AS INDICATED ON

1. PRIMARY FRAME TYPE: PARALLEL CHORD TRUSS WITH VERTICAL ENDS BUILT UP OF HSS STEEL SECTIONS AS INDICATED ON DRAWINGS IN PRATT, FINK, OR WARREN WEB CONFIGURATIONS. OVERHEAD (PORTAL) BRACING IS PROHIBITED.

2. DESIGN THE BRIDGE TO HAVE DEPTHS, SPANS, CLEARANCES AND GENERAL CONFIGURATIONS AS SHOWN, NOMINAL CHANGES TO SUIT THE MANUFACTURER'S SYSTEMS WILL BE ACCEPTED PROMDED THAT THE INSIDE CLEARANCE, MINIMUM SPAN AND REQUIRED TOP OF RAIL HEIGHT WILL NOT CHANGE. THE BRIDGE SHALL BE DESIGNED TO ACCOMMODATE FLOOD STAGE REQUIRED BY THE REGULATORY AGENCIES. NO PORTION OF THE STRUCTURE SHALL BE ALLOWED BELOW BOTTOM OF STEEL ELEVATION AS MANDATED BY THE REGULATORY AGENCIES.

H. DECK SYSTEM DESIGN: THE DECK SYSTEM WILL BE CAST—IN—PLACE OR PRECAST CONCRETE. FINISH SHALL BE MEDIUM—COARSE BROOM FINISH. IF CAST—IN—PLACE IS USED, LEAVE—IN—PLACE FORM SYSTEMS WILL NOT BE PERMITTED.

1. PLACEMENT OF WET CONCRETE ON THE DECK AFTER THE BRIDGE IS PLACED IN ITS FINAL LOCATION WILL NOT BE PERMITTED.

1. PROMING AND DECKING SYSTEMS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY AND ENVIRONMENTAL LOADS AS INDICATED BY THE STRUCTURAL ENGINEER INCLUDING DEAD, LIVE, SNOW, WIND, CONSTRUCTION, AND SEISMIC EFFECTS COMBINED AS INDICATED BY THE STRUCTURAL ENGINEER INCLUDING DEAD, LIVE, SNOW, WIND, CONSTRUCTION, AND SEISMIC EFFECTS COMBINED AS INDICATED BY THE APPLICABLE CODE.

J. MINIMUM LIVE LOADS SHALL BE IN ACCORDANCE WITH THE IBC AS ADDITED BY THE CITY OF BELLINGHAM.

MINIMUM LIVE LOADS SHALL BE IN ACCORDANCE WITH THE IBC AS ADOPTED BY THE CITY OF BELLINGHAM.

DESIGN FOR MINIMUM VEHICLE LOAD OF 10,000 POUNDS

SUBMIT SHOP DRAWINGS FOR ABUTMENT REINFORCEMENT AND BRIDGE STEEL.

ALL STEEL SHALL BE ASTM A588 OR ASTM A847 WEATHERING STEEL EXCEPT CONCRETE REINFORCEMENT AND PILING.

CAMBER SHALL BE AS SPECIFIED BY THE STRUCTURAL ENGINEER.

THE BRIDGE SHALL BE DESIGNED FOR VIBRATION.

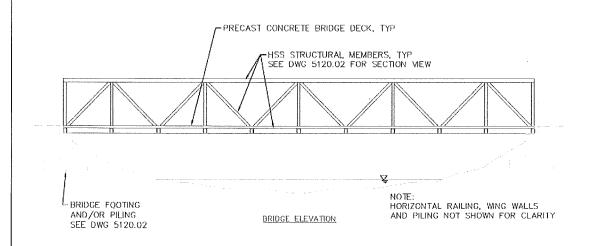
- WELDING: QUALIFY PERSONNEL ACCORDING TO AWS D1.1, "STRUCTURAL WELDING CODE STEEL"
  COMPLY WITH APPLICABLE PROVISIONS OF THE FOLLOWING SPECIFICATIONS AND DOCUMENTS:

  1. AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC"
- 2. ASTM A 6 "SPECIFICATION FOR GENERAL REQUIREMENTS FOR ROLLED STEEL PLATES, SHAPES, SHEETING PILING, AND BARS FOR STRUCTURAL USE'

- 3. ERECTION TOLERANCES: AISC \$303, "STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
  ALL EXPOSED SURFACES OF WEATHERING STEEL SHALL BE CLEANED IN ACCORDANCE WITH SSPC SP-6, COMMERCIAL BLAST CLEANING.
- S. DESIGN ABUTMENTS AND FOOTINGS. COORDINATE SIZE AND LOCATION OF CONCRETE FOUNDATIONS AND CASTING OF ANCHOR-BOLT INSERTS INTO FOUNDATION WALLS AND FOOTINGS.

  T. DESIGN COMPONENTS AND FABRICATE FRAMING TO PRODUCE CLEAN, SMOOTH CUTS AND BENDS, PUNCH ALL HOLES OF PROPER SIZE,
- T. DESIGN COMPONENTS AND FABRICATE FRAMENCE TO THOSE SEED AS TO AVOID LOCATIONS WHICH WILL IMPEDE OR PREVENT DEVELOPMENT OF THE SURFACE OXIDE COATING.

  V. SHOP FABRICATE ALL COMPONENTS



PARKS AND RECREATION DESIGN AND DEVELOPMENT

April 24, 2009

CITY OF BELLINGHAM PEDESTRIAN BRIDGE GENERAL DESIGN & NOTES DRAWING 5120.01

Sheet 14 of 18

Purpose: Residential Development Applicant: Tin Rock Development

Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

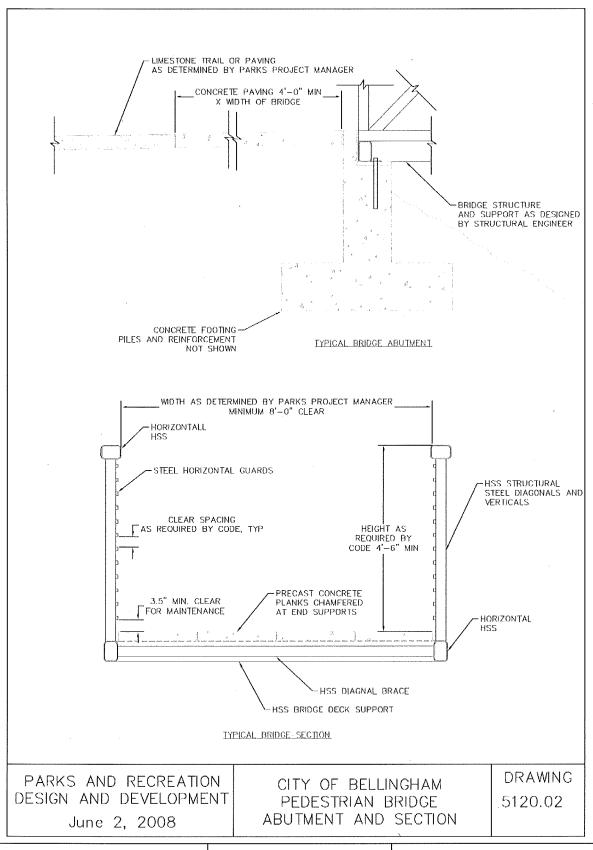
**Cordata Center Residential** 

**Bear Creek Preserve Conceptual Bridge Detail** (1 of 2)

In: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA



Purpose: Residential Development Applicant: Tin Rock Development

Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

**Cordata Center Residential** 

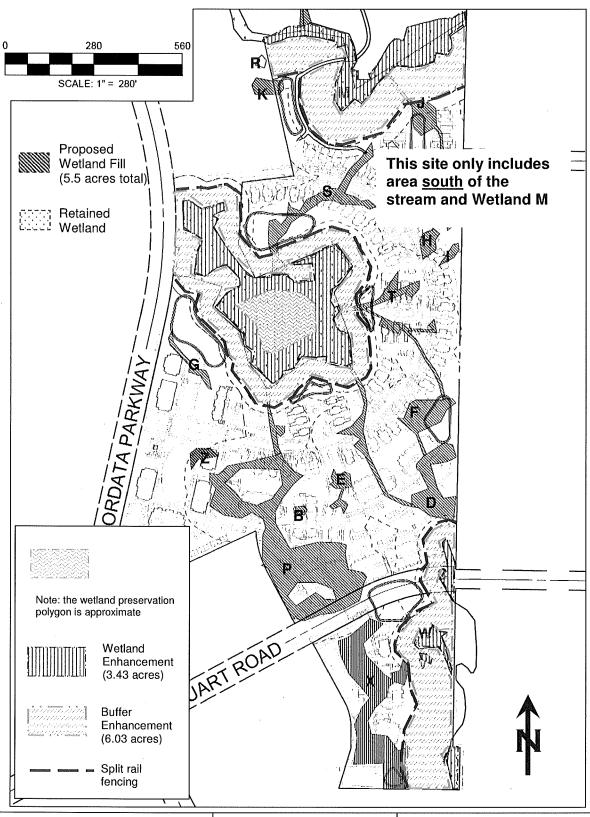
**Bear Creek Preserve Conceptual Bridge Detail** (2 of 2)

In: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA

Sheet 15 of 18



Purpose: Residential Development Applicant: Tin Rock Development Project #: NWS-2010-1144

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

**Cordata Center Residential** 

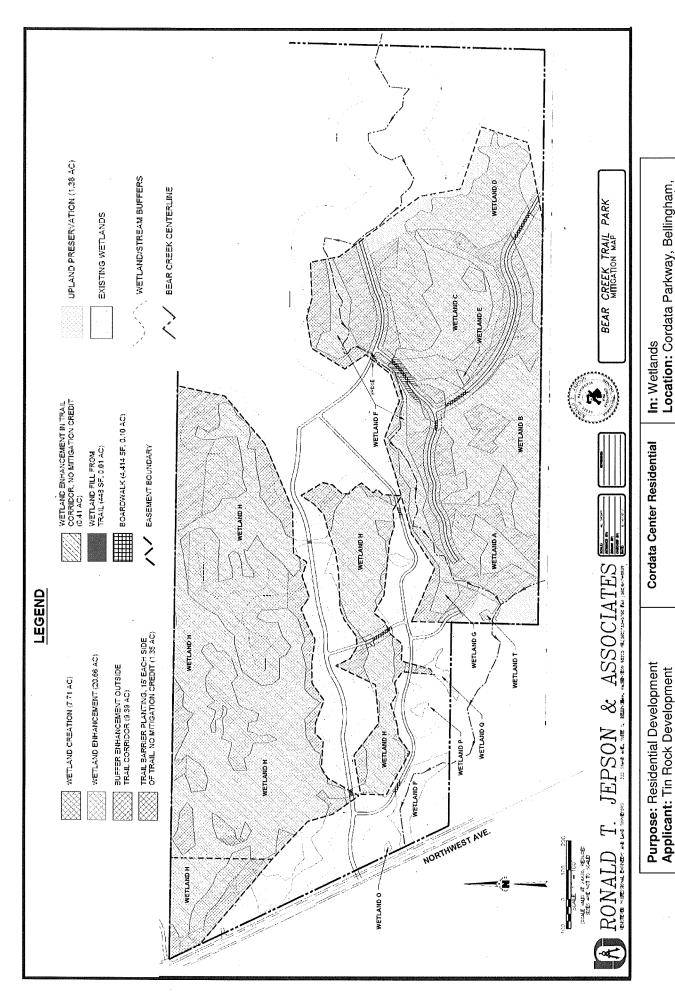
**On-site Mitigation Map** 

In: Wetlands

Location: Cordata Parkway, Bellingham,

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom State: WA

Sheet 16 of 18



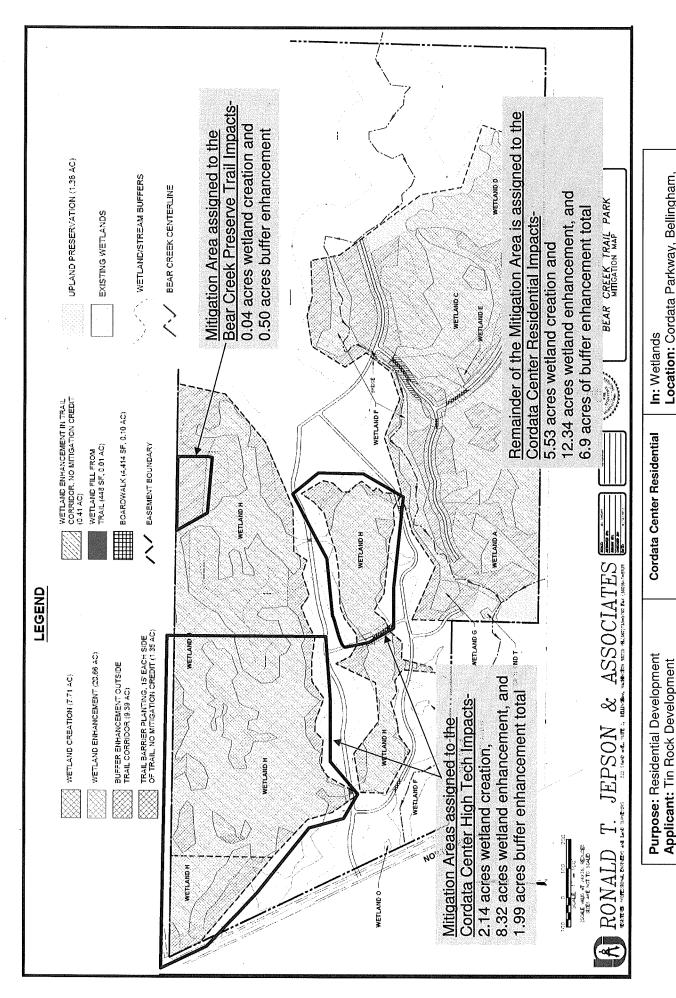
360.734.9484 www.nwecological.com 1911 C Street, Bellingham, WA 98225 Northwest Ecological Services, LLC Adjacent Prop. Owners: See JARPA Date: 01/08/2014

Off-site Mitigation Map

Project #: NWS-2010-1144

Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom

Sheet 17 of 18 State: WA



Northwest Ecological Services, LLC

Adjacent Prop. Owners: See JARPA

Date: 01/08/2014

Project #: NWS-2010-1144

Off-site Mitigation Map With individual project mitigation area

Location: Cordata Parkway, Bellingham, State: WA Sec/Twp/Rng: 1 and 12/38N/02E County: Whatcom

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1911 C Street, Bellingham, WA 98225 360.734.9484 www.nwecological.com